

# Proposed Education Council Actions

*For discussion at the June 17, 2015 Education Council meeting*

## Local/Regional Collaboration

### Contributors

**Writing Group:** Shannon Sprague, Lisa Hiruki-Raring, Steph Bennett, Jennifer Hammond, Bronwen Rice, Lisa Nakamura, Christos Michalopoulos, Pat Drupp,

**World Cafe Participants:** Louisa Koch, Carrie McDougall, Ron Gird, Julia Galkiewicz, John McLaughlin, Frank Niepold, Dan Pisut, Marlene Kaplan, Atziri Ibanez

### Action:

Support the establishment and maintenance of regional NOAA educator networks to enable cross-agency communication, coordination, and collaboration around high priority education topics.

### Objective:

5.3: NOAA educators and partners collaborate at local, regional, and national levels to coordinate efforts, build capacity, and better serve educational audiences

### Strategies:

5.C: Establish and support NOAA educator networks with emphasis on cross-agency communication, coordination, and professional development

### Council Units:

Lisa Hiruki-Raring, NMFS

Steph Bennett, NOS-OCM

All, specific to regions

### Tasks:

1. Identify regions to pilot test. Primary criterion should be the availability of a local NOAA educator willing to lead this effort for their region.
2. Pilot regions identify high priority national and regional topics to be used as the focus for regional collaboration.
3. Pilot regions articulate direct connections between priority topic and an objective in the Strategic Plan.
4. OEd staff provide support and resources for regional coordination efforts (e.g., contact info of NOAA educators, list of NOAA partners and grantees, etc.)

5. Build on existing efforts to enhance cross-network communication, coordination, and collaboration (e.g., Share-a-thon or regional level networking events integrated into existing network meetings, PD)
6. Create appropriate mechanisms for reporting and communication among the regions, between the regions, and the NOAA Education Council to find synergies across pilot regions and with the national landscape as much as practicable (e.g., quarterly calls within regions and among regional leads, regional updates to the Council, possible regional seats to the Council, regional section to the Annual Education Accomplishments Report, first NOAA Educator meeting, etc.)
7. Collaborate with local/state education agencies (LEAs), informal science education groups, and partners to embed NOAA content into science and STEM education initiatives, as appropriate

### **Milestones/Achievements:**

1. At least two regional pilots established
2. Regular dialog between pilot regions and the Education Council
3. Regular dialog between regions.
4. Dedicated spots in the Accomplishments Report reserved for “regional” successes.
5. Identifying quality regional efforts and elevate them by having Louisa brief NOAA leadership
  - a. Louisa can brief NOAA leadership on great programs that might otherwise be missed
  - b. Recognition by higher-ups could be an incentive
  - c. Collating Unified Data Call information for the regional pilots

### **Output/Evidence of Progress:**

5.3a: Expanded opportunities for communication and learning within the NOAA Education community.

1. Demonstrate stronger and more robust ties between network members through a Social Network Analysis over 2 years
2. Impactful regional accomplishment stories – is there an improvement in the quality of regional accomplishment stories over time?
3. Did improved regional collaboration through the pilot regions enable progress on high priority topics identified?
4. Addition of the “regional” tag to our unified data call database
5. Enables regions to connect to national efforts

# Product/Program Development and Delivery (P2-D2)

## Contributors

**Writing Group:** Frank Niepold (Co-Lead), Peg Steffen (Co-Lead), Ron Gird, Tracy Hajduk, Molly Harrison, Atziri Ibanez, Nina Jackson, Bruce Moravchik, Dan Pisut.

**World Cafe Participants:** Stephanie Bennett, Marlene Kaplan, Louisa Koch, Carrie McDougall, John McLaughlin, Bronwen Rice, Shannon Sprague.

## Action:

Develop a process to identify stakeholder needs, identify NOAA's high-value products and programs that meet those needs, and disseminate them through improved marketing and partnerships.

## Objective:

5.3: NOAA educators and partners collaborate at local, regional, and national levels to coordinate efforts, build capacity, and better serve educational audiences.

## Strategy:

5.D: Develop consistent and coordinated educational approaches across NOAA for high-priority educational topics.

## Council Units:

CPO (Frank), NERRS (Atziri), NESDIS (Dan), NOS (Peg/Bruce), NWS (Ron) + more?

## Tasks:

*Phase 1:* Conduct needs assessment of education materials and accompanying professional development with stakeholders - state science supervisors, school districts, AMS, PBS etc. Focus to be on K-12 in both formal and informal settings.

*Phase 2a:* Develop a process to work with stakeholders to identify and distribute top ranking products and programs. Specific tasks in this phase include:

- Include stakeholders in review process
- Further develop partnerships with stakeholders
- Review past exemplars (e.g. Data in the Classroom, Oysters in the Classroom) that may provide lessons learned in development and dissemination cycles.
- Adopt/adapt a rubric for product evaluation (maintain contact with BSCS working group)
- Establish criteria for products/programs seeking review - what standards does a product need to meet to be reviewed under the rubric?
- Develop dissemination channels/PD for criteria and process

*Phase 2b:* In parallel with Phase 2a, identify existing products/programs that meet specific needs identified in Phase 1 (low hanging fruit). These products/programs will be distributed to selected stakeholders to be incorporated into education activities. Usage of these products/programs will be measured and evaluated (e.g., using Google Analytics).

*Phase 3:* Combine results of phases 2a and 2b. Develop final report to Education Council.

### **Milestones:**

TBD

### **Output/Evidence of Progress:**

5.3b (suggested): Defined process to disseminate NOAA's high-value products and programs.

5.3c (suggested): Increased use of NOAA's high-value products and programs.

- Needs assessment of education materials
- Guidance for NOAA educators about how to design (or redesign) their products/programs to meet the needs of NOAA's stakeholders and how to maximize their distribution.
- Better understanding of how NOAA's high-value products and programs are used.

# Internal Professional Development

## Contributors

**Writing Group:** Sarah Schoedinger, Julia Galkiewicz, John McLaughlin, John Baek, Carrie McDougall, Lisa Nakamura

**World Cafe Participants:** Tracy Hajduk, Dan Pisut, Louisa Koch, Christos Michalopoulos, Bruce Moravchik, Jennifer Hammond, Kristen Jabanoski, Nina Jackson, Peg Steffen, Stephanie Bennett

## Action:

Build and implement a process for prioritizing needs and providing professional development on evidence-based approaches to the NOAA Education community.

## Objective:

- 5.4 - NOAA and partner organizations use effective evaluation, performance monitoring, and evidence-based approaches in the design and management of educational programs, products, and services.
  - Focus on evidence-based approaches

## Strategies:

- 5.C - Establish and support NOAA educator networks with emphasis on cross-agency communication, coordination, and professional development.
- 5.D - Develop consistent and coordinated educational approaches across NOAA for high-priority education topics.

## Council Units:

- OEd will consider leading this effort if there are others willing to help implement this action (not simply receive PD).
- Representatives of the following LOs/POs indicated interest from their network or someone in breakout group felt they would be good to add:
  - Sea Grant
  - NMFS
  - NERRs
  - NWS

## Tasks/Milestones:

- Prioritize needs identified by the 2014 needs assessment and other feedback (book club, Council retreat, working groups/network presentations, etc.). Currently, these include:
  - Science communication
  - Climate change

- Evaluating outreach events
- NGSS
- Others?
- Assess available resources to conduct PD
  - Think about using existing resources like the Library Brown Bag Seminar, One NOAA Seminar, etc.
- Try out and test different approaches and offerings based on available resources
  - Consider different topical options and platform options
  - Approaches can include synchronous discussion
- Collect feedback on PD offered
  - Did the topic and platform work/ was it useful?
  - Do participants report an intent to integrate what they learned?
  - Did participants integrate what they learned?
- Connect people to existing PD
  - E.g., Group was thinking about how Bruce collects and disseminates information about existing opportunities for climate related PD.

### **Output/Evidence of Progress:**

- 5.4b - Established a process for meeting the professional development needs of the NOAA Education community
  - Provide 4 professional development opportunities on evidence-based practices (sustained opportunities for learning) over a 2 year period.
  - Majority of participants intend to or actually integrate what they learned.
  - Documentation of what worked and why over the 2 years.

### **Assumptions:**

- Primary audience is the NOAA Education community
- Utilize existing training resources and expertise where possible
- Coordinate delivery across the Council to minimize redundant efforts

# Understand how to better reach underserved audiences

## Contributors

**Writing Group:** Marissa Jones, Lisa Hiruki-Raring, Kristen Jabanoski, Nina Jackson, Marlene Kaplan, Tracy Hajduk, Peg Steffen, Louisa Koch

**World Cafe Participants:** Jennifer Hammond, Frank Niepold, John Baek

## Action:

Develop consistent and coordinated approaches for reaching underserved audiences for science literacy, stewardship, preparedness, and recruitment.

Definition: Underserved audiences: Individuals and groups who have traditionally not had access to environmental education or interpretive programs, activities, or experiences. (Source: adapted from the National Association for Interpretation)

## Objective:

5.5. NOAA develops and supports a coordinated portfolio of products, programs, and partnerships that improves education opportunities in NOAA-related content areas for underserved audiences.

## Council Units:

Co-leads: Kristen, Nina

Office of Education Silver Spring

NMFS

NWS?

Possibly Sanctuaries

## Strategies:

5.D (primary), 5.C, 5.B

## Tasks:

1. Literature review
  - Define audiences
    - Recruitment/higher education
    - K-12
    - Communities
  - What works? What do people already know?
    - Best practices
    - Dissemination methods
  - Look at other Federal Agencies to find partnership opportunities
    - There is a potential for joint opportunities so we want to understand what others are working on.
2. Internal case study review and analysis

- Define the scope of the internal review.
    - Set a number of projects that meet certain benchmarks (longevity) for meeting underserved audiences. Prioritize programs if they have evaluation data.
  - Identify contacts
    - Human Resources, Equal Employment Opportunity Representative, Educators - perhaps draw on regional contact list.
    - Connection to Local/Regional C&C Action.
  - Report on case studies of successful programs
    - Identify best practices: This review would not consider all programs. It would focus on those already reaching underserved audiences.
  - Determine priorities
    - Where can NOAA make a difference?
      - Who is already working in these areas and how can they help existing efforts.
    - Where are there gaps? Where are we doing a good job?
      - Communities we are not reaching could be priorities.
    - Not necessarily low hanging fruit.
3. Internal professional development
- Disseminate set of recommendations
  - Connect with other council groups (e.g., Internal Professional Development)
  - Present tailored recommendations to Council Units
  - Connect with efforts to create products and programs that are effective
  - Connect with NOAA's priorities

## **Output/Evidence of Progress:**

5.5a. Developed a coordinated portfolio of products, programs, and partnerships that target underserved audiences.

Focus on understanding the portfolio and best practices for targeting underserved audiences.

Deliverables:

- Literature review report
- Case study report
- Set of recommendations

Milestones:

- Complete literature review
- Complete internal review
- Disseminate findings to NOAA Educators



# New Common Measures

## Contributors

**Writing Group:** Bronwen Rice, Frank Niepold, John Baek, Louisa Koch, Stephanie Bennett, Tracy Hajduk

**World Cafe Participants:** Jennifer Hammond, Kristen Jabanoski, Atziri Ibanez, Sarah Schoedinger, Lisa Hiruki-Raring, Ron Gird, Julia Galkiewicz, Bruce Moravchik

## Action:

- Reconvene M&E Working Group to decide on and develop new common measures.

## Objective:

- 5.4. NOAA and partner organizations use effective evaluation, performance monitoring, and evidence-based approaches in the design and management of educational programs, products, and services.

## Strategies:

- 5.E. Create and adopt common performance measures and evaluation practices in NOAA-funded education programs.

## Council Units:

- For M&E WG - A majority of Ed Council Units - This group provides advisory and oversight role through all Phases. Members should either be Council members or check in frequently with voting members.
- Specific Measure Teams - This group is convened based on the relevancy of their programs to the measure being developed. For example:
  - If Conservation and Stewardship - Sanctuaries; BWET, NERRS, ELG, NOS (Climate Stewards) Sea Grant (all have vested interest and want to help define).

## Tasks/Milestones:

### Phase 1 (3 months)

- M&E WG reviews evaluation recommendations from (including but not limited to) network presentations, working groups and Annual Review of Progress.
- Prioritize the proposed common measures based on assessment of need, timeliness, resources, the context of new strategic plan, the amount of burden for collecting and reporting data (existing and available vs. new data collection at field level).
- That list may include (evolutionary stage, see diagram below):
  - Develop common stewardship measure (1)
  - Develop common two-year follow-up of postsecondary graduates measure (3)
  - Develop common educational products measure (1)
  - Develop common volunteers measure (3)
  - Develop common partnerships measure (2)
- M&E WG will decide which measures to develop or decide not to develop any measures.

- M&E WG will map out plan of action for Phase 2.

**Phase 2** (12-18 months)

- Develop common definitions and performance measure. For example,
  - Define a conservation and stewardship program (using existing definition)
- Identify relevant programs
- Host writing session
- Draft and revise common definitions and measure
- Pilot data collection, if needed
  - Develop common forms or data collection items
  - Submit PRA clearance, if needed
- M&E WG Review and Vote
- Ed Council Review and Vote - MILESTONE

**Phase 3** (after 2 years)

- Implement method of data collection as part of Unified Data Call
- Outreach with programs to collect and report data

**Output/Evidence of Progress:**

- 5.4a. Improved the practice of evaluation by educators to inform the improvement and management of NOAA Education programs.